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> MLBINST 4335.1D 31 May 2002

COAST GUARD MOTOR LIFEBOAT PROJECT RESIDENT OFFICE INSTRUCTION 4335.1C

Subj: ADMINISTRATION OF WARRANTY PROVISIONS FOR THE 47 FT MOTOR LIFEBOAT

1. PURPOSE. The purpose of this instruction is to update policy and provide new guidance concerning the administration of the warranty program for the 47 Motor Lifeboat (MLB). The principal purpose of a warranty program in a Government contract is to delineate the rights and obligations of the Contractor and the Government for defective items and services and to foster quality performance. The MLB Warranty provides the Coast Guard additional time after acceptance in which to determine and report defective items or services.

### 2. DEFINITIONS:

- a. 47 Foot Motor Lifeboat Project Resident Office (MLB PRO). The MLB PRO is the Coast Guard office responsible for enforcing the contract warranty terms and conditions, tracking the status of warranty repairs and materials, confirming the technical acceptance of repairs, reporting the status of each MLB's warranty item, and updating this instruction. Additionally, the MLB PRO will provide technical and financial assistance for 6V92 Detroit Diesel engine repairs in accordance with enclosure (6).
- b. Textron Marine & Land Systems (TM&LS). TM&LS is the MLB production prime Contractor responsible for construction and delivery of the MLB and associated contract line items including warranty, with the exception of the 6V92 Detroit Diesel engine warranty.
- c. <u>Station</u>. A Coast Guard Unit designated by the contract to receive a production MLB.
- d. TM&LS Field Service Representative (FSR). A repair facility in the geographic locality of the receiving Station hired by TM&LS/MLB PRO to perform warranty repairs. The FSR is directly responsible to TM&LS/MLB PRO while in the performance of these repairs.
- e. <u>Class Wide Problem</u>. A reoccurring problem, which may be affecting all production vessels, and that, could be a result of a manufacturing or construction deficiency.
- f. <u>Latent Defect</u>. Those items which are faulty or defective in nature as a result of Contractor or Subcontractor processes, materials, or any other defect causing a condition which was present before and/or after acceptance that could not be discovered using reasonable inspection methods.

g. Warranty Item. Those items that were operating correctly upon acceptance, which subsequently fail due to cause(s) not directly and solely related to abuse, misuse or failure to complete required Preventive Maintenance Schedule (PMS).

### 3. DISCUSSION:

- a. Each MLB is delivered to the Coast Guard with a one-year warranty on all systems and equipment with the exception of the two 6V92 Detroit Diesel engines for which TMLS has limited responsibility. The Coast Guard MLB PRO has assumed financial responsibility for repairs to the 6V92 Detroit Diesel engines for four years or until such time as the engine(s) reach 3,000 operational hours. This financial assistance from the MLB PRO will expire for all boats, June 30 2004, regardless of engine hours or years in service. The manufacturer of the Reduction Gears has an eighteen month warranty. Enclosure (6) provides guidance on the 6V92 Detroit Diesel engine repair program.
- b. Prior to MLB acceptance, a detailed Warranty Program briefing will be provided by the President of the MLB Acceptance Trial (AT) Board to each Station. The Station CO/OINC, EPO and other key Group/Station personnel are highly encouraged to attend.
- c. The warranty program will normally be administered only during the MLB PRO working hours, Monday through Friday 0700-1500 Central Standard Time. Every effort will be made to see that this process is carried out as expeditiously as possible. Station personnel are encouraged to contact the Warranty Administrator via telephone when operational readiness is degraded. You may contact the warranty administrator after hours to assist you with technical advice by Cellular phone (504) 430-6508. Detroit dealers will only work nights or weekends with advance notice. Overtime costs for FSRs will normally be charged to the unit.

See Enclosure (1) for MLB PRO points of contact.

- d. Stations and Groups are encouraged to use the Contractor's warranty program and provide TM&LS a reasonable opportunity to respond to each warranty claim. In accordance with the contract, the Contractor has 10 days to respond to any request for warranty assistance. It is understood that due to operational readiness concerns, it may be more advantageous for a Station to affect repairs immediately. See Enclosure (2) for a diagrammatic view of the warranty process.
- e. Stations are encouraged to maintain close contact with their FSR to expedite the closure of warranty items. Note: The Stations are not authorized to direct the FSR to conduct work, as the FSR must coordinate work authorizations through TM&LS or MLB PRO, but open communication between the Stations and the FSR is expected and encouraged. Stations are not authorized to contact TM&LS or FSR directly to request services, parts or equipment.
- f. Under normal operating conditions and when operational readiness <u>is</u> <u>not degraded</u>, the following procedures will be followed for reporting warranty items:

1) The Station will report all system and equipment failures on a Warranty Determination Request (WDR) to the MLB PRO. The WDR will be in addition to any other required message or correspondence (i.e. CASREP, SITREPS).

Note: Minor discrepancies such as loose wiring, loose bolts, etc., will be repaired by Station personnel. After completing a minor discrepancy repair, the Station may submit a Warranty Determination Request/Warranty Correction Report (WDR/WCR) in lieu of a WDR for possible replacement in kind of the part(s). The WDR/WCR will be used for tracking purposes only and to help identify class-wide issues.

- 2) Once the MLB PRO receives a WDR from a Station, the Contracting Officer or the designated PRO Warranty Administrator will make a warranty determination. If the decision is to pursue a warranty claim, the Warranty Administrator will assign a Warranty Claim Number.
- 3) The PRO Warranty Administrator will instruct TM&LS to take action, notify the Station of the planned corrective action and provide them the assigned Warranty Claim Number. This notification to the Station will be via electronic mail and is to be considered a "Warranty Receipt". TM&LS/MLB PRO will direct the FSR to investigate and repair. Stations are authorized to coordinate dates and times with the FSR after warranty receipt.
- 4) Once the FSR has completed repairs, the Contracting Officer will determine if repairs are satisfactory. Because the Contracting Officer is not able to evaluate repairs onsite, he/she will rely upon the expertise of Station personnel and the Contractor's representatives to assist in making such determinations.
- 5) Underway testing may be required to determine if completed warranty repairs are satisfactory. When conditions exist that will delay the underway test, the Station will notify the PRO Warranty Administrator, stating the actual date of the repair, the reason the test was not conducted and the estimated time frame in which the test can be accomplished.
- 6) Upon completion of the repair and/or test, the Station will send a Warranty Correction Report (WCR) to the PRO. This report should describe all actions taken to correct the problem, along with a list of parts replaced or repaired, the date the part was replaced (if applicable) and the number of operational days lost due to this casualty. See enclosure (3) for examples of a WDR, a WCR and a WDR/WCR.
- g. When operational commitments preclude the use of the normal warranty process and operational readiness <u>is degraded</u>, the following quidelines will be followed:
  - 1) The Station will submit a CASREP to the Operational Commander with an info copy to the MLB PRO. The Station will also submit a WDR or WDR/WCR to the MLB PRO, referencing the CASREP on line 4.

- 2) If the Station cannot wait for the normal warranty process to take effect due to operational commitments, the Station may immediately affect repairs in accordance with manufacturer's recommended procedures to return the boat to an operational status. Once corrective action has taken place, a WDR/WCR will be sent to the MLB PRO.
- 3) If the Station elects not to affect repairs immediately, they will report the system or equipment failure on a WDR to the MLB PRO. Once the MLB PRO receives a WDR\_from a Station referencing a CASREP, the Contracting Officer or the designated Warranty Administrator will make a warranty determination. If the decision is to pursue a warranty claim, the PRO Warranty Administrator will assign a Warranty Claim Number and forward the warranty claim if appropriate to TM&LS for action.

<u>Note</u>: Warranty is an administrative process and should not be confused with the reporting of casualties that affect operational readiness. In those instances where a CASREP is submitted as the result of a suspected warranty defect, it is imperative that the WDR or WDR/WCR references the associated CASREP.

- 4) The PRO Warranty Administrator will notify the Station of the planned corrective action and provide them the Warranty Claim Number via phone call followed by an electronic mail. Sufficient details will be provided to the Station to allow them to make an educated decision on whether they should initiate corrective action immediately, or wait for correction through the Warranty Program.
- 5) If the Station determines the recommended action from TM&LS/MLB PRO is unacceptable and based on operational commitments the Station cannot wait to make repairs, the Station may affect repairs in accordance with manufacturer's recommended procedures to return the boat to an operational status. Once corrective action has taken place, the Station will send a WCR to the MLB PRO.

Note: If for any reason the Station performs repairs themselves, they will maintain possession of the failed component for possible investigation by the FSR of the cause of failure. In some cases Contractors may require that failed components be shipped back to their facility before a reimbursement is made. This will be handled on a case by case basis. Following the FSR's investigation, TM&LS will advise the Contracting Officer as to their responsibility under the contract's warranty provisions. The Contracting Officer may seek replacement in kind for all defective components, depending on the final warranty determination.

6) If the recommended action is acceptable and the Station can wait to affect repairs, the PRO Warranty Administrator will notify TM&LS to take corrective action. Continue with the procedures outlined previously in 3.f.(3) through 3.f.(6).

- h. inform each Station, via electronic mail, of the status of their open warranty items. The PRO will also identify those warranty items which could be a latent defect, or create class wide problems.
- i. If class wide problems or issues arise, a Warranty Advisory will be sent to all Units. See Enclosure (5) for a sample Warranty Advisory message.

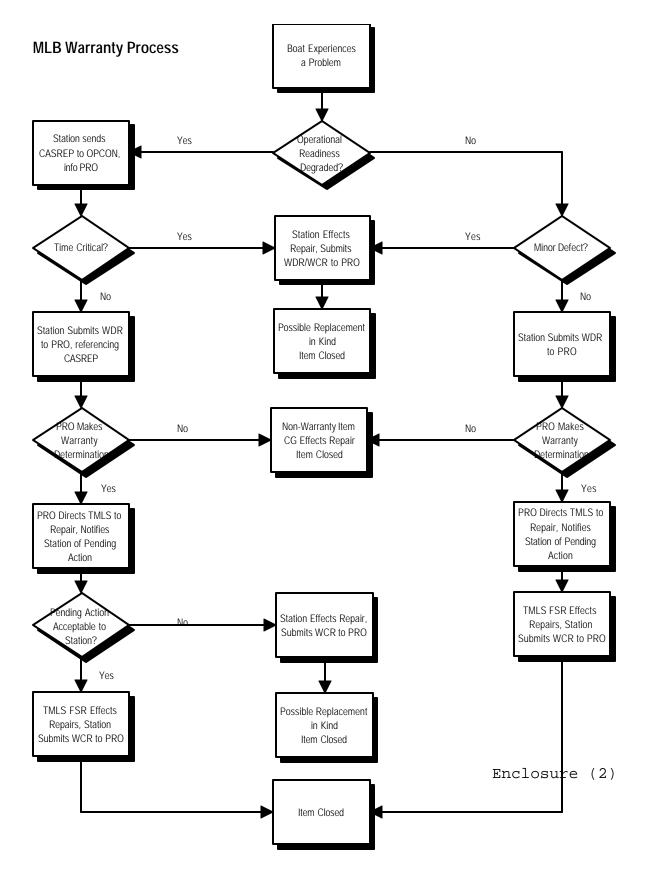
### J. L. BRAGAW

ENCL: (1) MLB PRO Points of Contact

- (2) Warranty Reporting Process Diagram
- (3) WDR, WCR and WDR/WCR
- (4) Warranty Status Reports
- (5) Warranty Advisory
- (6) DDC 6V92 Engine Repair Program
- (7) Reduction gear warranty

# WARRANTY PROGRAM POINTS OF CONTACT

1Commanding Officer	(504) 253-6160	
2. Executive Officer	(504) 253-6162	
3. Contracting Officer	(504) 253-6161	
4. Asst. Contracting Officer	c (504) 253-6175	
5. Warranty_Administrator	(504) 253-6168	
6. Warranty_Program Manager	(504) 253-6177	
7. Warranty Assistant	(504) 253-6174	
8. Command Cell phone	(504) 481-7603	
9. Warranty Cell phone	(504) 430-6508	
10. Website:	http://www.uscg.mil/hq/g-a/47'mlb/index.htm	



- 1. WARRANTY MESSAGES: There are four warranty message types; the Warranty Determination Request (WDR), Warranty Determination Request Update (WDR Update), the Warranty Correction Report (WCR) and The Warranty Determination Request/Warranty Correction Report (WDR/WCR). The WDR, WDR Update, and WCR are generally used for the normal warranty process, the WDR/WCR is generally used when the Station affects repairs themselves. Enclosure (2) illustrates when to use each.
- 2. WDRs WDR Updates, and WDR/WCRs will address mission impact, description of failure or defective part, part number and suspected cause of failure. Each WDR, WDR Update, WCR and WDR/WCR will also include both port and starboard engine hours. For hull casualties, include speed and sea state. For a propulsion casualty, include speed and RPM. Some amplification to the mission impact may be necessary to more clearly define the reduction in capabilities. This is a key factor that the MLB PRO Warranty Officer evaluates for mission critical failures.

### SAMPLE WARRANTY DETERMINATION REQUEST (WDR) MESSAGE

P (DTG)
FM COGARD (Insert Unit name)
TO COGARD PRO NEW ORLEANS LA
AIG 4979
INFO (Insert your operational commander)
COMDT COGARD WASHINGTON DC//G-OCS-2/G-SEN/G-AWP//
COGARD NMLBS CAPE DISAPPOINTMENT WA
BT
UNCLAS//N04336//

SUBJ: CG47(Insert hull number.) WDR

- (Insert discovery/notification date of defect.)
- 2. (Insert detailed description of problems and any contributing and/or subsequent circumstances. Include engine hours.)
- 3. PART #/SERIAL # (If applicable.)
- 4. (Insert boat status and Date Time Group (DTG) of CASREP message, if any.)
- 5. THIS DEFECT (Does/Does Not) AFFECT OPERATIONAL STATUS (i.e. If this were the only problem on the craft, would the boat be placed in Charlie?)
- 6. (Insert location of craft.)
- 7. (Insert craft availability dates for warranty evaluations/repair or Unit's intention to correct deficiency on its own. Address specific scheduling concerns, if any.)
  BT
  NNNN

# SAMPLE WARRANTY DETERMINATION UPDATE REQUEST (WDR UPDATE) MESSAGE (Used to indicate a change from the previously submitted WDR)

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P (DTG)
FM COGARD (Insert Unit name)
TO COGARD PRO NEW ORLEANS LA
ATG 4979
INFO (Insert your operational commander)
COMDT COGARD WASHINGTON DC//G-OCS-2/G-SEN/G-AWP//
COGARD NMLBS CAPE DISAPPOINTMENT WA
UNCLAS//N04336//
SUBJ: CG47(Insert hull number.) WDR UPDATE
1. (Insert DTG of original WDR.)
2. WARRANTY ITEM NR: (Insert PRO assigned warranty number)
3. (Insert detailed description of how situation has changed
    from original WDR, i.e. problem worsened, craft status
   changed,
4. additional information pertinent to items correction, etc.)
   (Insert boat status and Date Time Group (DTG) of original
    CASREP message, if any.)
ВТ
NNNN
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P (DTG)

FM COGARD (Insert Unit name)

#### SAMPLE WARRANTY CORRECTION REPORT (WCR) MESSAGE

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TO COGARD PRO NEW ORLEANS LA
AIG 4979
INFO (Insert your operational commander)
COMDT COGARD WASHINGTON DC//G-OCS-2/G-SEN/G-AWP//
COGARD NMLBS CAPE DISAPPOINTMENT WA
UNCLAS//NO4336//
SUBJ: CG47(Insert hull number.) WCR
A. MY (Insert original message DTG.)
1. WARRANTY ITEM NR: (Insert PRO assigned warranty number).
2. (Describe what action was necessary to correct problem. The
WCR will contain information describing how and when the
correction was made (e.g. was the equipment/part repaired or
replaced, if replaced, include date), including corresponding
costs and CG Man-hours expended, if any. This information is
needed for resolving warranty claims with the Contractor. Include
operational days lost due to this casualty, if any, and if
possible list what parts were replaced. Include engine hours.)
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# SAMPLE WARRANTY DETERMINATION REQUEST/WARRANTY CORRECTION REPORT (WDR/WCR) MESSAGE

P (DTG) FM COGARD (Insert Unit name) TO COGARD PRO NEW ORLEANS LA AIG 4979 INFO (Insert your operational commander) COMDT COGARD WASHINGTON DC//G-OCS-2/G-SEN/G-AWP// COGARD NMLBS CAPE DISAPPOINTMENT WA UNCLAS//NO4336// SUBJ: CG47(Insert hull number) WDR/WCR 1. (Insert discovery/notification date of defect.)

- 2. (Insert detailed description of problems and any contributing and/or subsequent circumstances. Include engine hours.)
- 3. PART #/SERIAL # (If applicable.)
- 4. (Insert boat status and Date Time Group (DTG) of CASREP message.)
- 5. WARRANTY ITEM NR: (Insert warranty number.)
- 6. (Describe what action was necessary to correct problem. The WDR/WCR will contain information describing how and when the correction was made (e.g. was the equipment/part replaced or repaired, if replaced, state part number and date replaced), including corresponding costs and CG Man-hours expended, if any. This information is needed for resolving warranty claims with the Contractor. Include operational days lost due to this casualty, if any, and if possible list what parts were replaced.) RТ

# 47' MLB Project Resident Office Warranty Status Report

The MLB PRO will no longer issue periodic warranty status reports to the fleet, but the reports are maintained and updated weekly. If you need a current status of any item, please contact any of the below numbers for the most recent report.

Administrator (504) 253-6168 (w)

Assistant (504) 253-6177 (w)

Assistant (504) 252-6174 (w)

Website at: Motor Lifeboat Replacement Project

http://www.uscg.mil/hq/g%2Da/47%27mlb/index.htm

# Warranty Advisory Messages

To view all 47' MLB Warranty Advisory messages click on:

MLB Warranty Advisories

http://www.uscg.mil/hq/g%2Da/47%27mlb/mlbwrtyadvisories.htm

### SAMPLE WARRANTY ADVISORY MESSAGE

R 111853Z DEC 98 ZUI ASN-D08345000463 FM COMDT COGARD WASHINGTON DC//G-AWP/G-OCS-2/G-SEN// TO AIG 4979 INFO COGARD PRO NEW ORLEANS LA BT

UNCLAS //N04336//

SUBJ: 47FT MLB WARRANTY ADVISORY 022

- 1. IN AN EFFORT TO DETERMINE IF A POTENTIAL PROBLEM EXISTS WITH THE 6V-92'S FRESH WATER COOLING SYSTEM, THE MLB PRO WOULD LIKE ALL UNITS TO CONDUCT THE FOLLOWING TEST AS TIME PERMITS.
- 2. WHILE UNDER A LOAD AND AFTER OPERATING TEMPERATURES HAVE BEEN ESTABLISHED AT 175 DEGREES TO 185 DEGREES FOR FIFTEEN MINUTES, BRING ENGINES UP TO RATED RPM'S (2100+). CONDUCT A VISUAL INSPECTION OF THE PLASTIC SIGHT GLASS ON THE COOLANT RECOVERY SYSTEM BOTTLE AND NOTE THE PRESENCE OF ANY AIR BUBBLES TRAVELING IN THE TUBE.
- 3. ANY DISCOLORATION OF THE COOLANT SHOULD BE NOTED IF DIFFERENT FROM THE ORIGINAL COLOR.
- 4. ALL FINDINGS PERTAINING TO THE INSPECTION SHOULD BE DIRECTED TO THE PROJECT RESIDENT OFFICE VIA E-MAIL OR PHONE, POC CWO BRANDT MARTIN, (504) 253-6168.

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# Coast Guard Engine Repair Program

The original 47' MLB contract included a 3000 hour or four year extended engine warranty program. As part of a recent settlement of contract claims, the MLB Prime Contractor has been relieved of the extended engine warranty. The Contractor still has an extremely limited one-year warranty program for these engines. The Coast Guard 47' MLB Project Office has taken over the four year or 3000 hour engine repair program, defined below, that will provide financial and technical assistance for casualties to the Detroit Diesel 6V92. For all casualties on engines with less than four years or 3000 hours, units will submit WDRs/WCRs as required in this instruction. The PRO will determine whether WDR is handled under the Contractor's warranty program or the PRO's repair program.

The Project office is scheduled to close in June 2004. The Coast Guard engine repair program will terminate at that time, regardless of years in service or hours on engines.

Depending on the nature of the casualty, the PRO technicians may require more information or troubleshooting in order to process your claim. NOTE: To aid you and the PRO in troubleshooting your engines, it is strongly recommended that you complete an engine parameter spreadsheet(see link below), along with current DEMP's reading as soon as you receive a new MLB. These readings should be conducted with a clean bottom and calm sea, and filed in your boat record to assist you and your relief in the future. Click on the below web link, or contact the 47' MLB PRO Warranty Administrator for a copy of the spreadsheet:

# MLB Warranty Information

http://www.uscg.mil/hq/g%2Da/47%27mlb/MLBwarranty.htm

# Engine Repair Program.

Coast Guard Station and Group technicians will be responsible for basic troubleshooting, removal of engine(s), and renewal of most external engine parts. All external engine parts costing less then \$500.00 will be the responsibility of the Unit. The following main engine components will be covered under the extended warranty and funded by 47' MLB PRO office:

- - engine block
- - cylinder heads including exhaust valves, rocker
  - arm assemblies
- - cylinder liners
- - pistons and rings
- - connecting rods and bearings
- - camshafts and bearings
- - crankshaft and bearings
- - lube oil pump

Enclosure (6)

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- - accessory drive
- - all OEM exhaust parts and manifolds

Parts only, Unit to install

- - turbocharger
- - Parts only, Unit to install
- - Failed heat exchanger
- Parts only, Unit to install
- - After cooler (Does not cover cleaning)
- - flywheel

In an effort to determine the level of repairs that may be required and before any major disassembly is started, the following data may be required for operational engines:

- 1. Complete the engine spreadsheet and DEMP readings.
- 2. Complete cylinder compression test, in accordance with DDC's service guide, and log results. Inspect cylinder rings visually through the air box, and document findings. Note: Several new/used cylinder compression kits have had defective check valves and faulty gauge readings. Inspect all parts prior to conducting cylinder compression readings, ensure check valve is functioning properly and gauge is calibrated.
- 3. Any means to enhance the PRO's understanding of the circumstances is strongly encouraged (Digital pictures, video borescope).
- 4. Run and print a complete set of pro-link engine diagnostic tapes. PRO may designate specific readings to take.
- 5. Verify underbody condition through an actual haul-out. Inspect hull growth and condition of trim tabs, shaft anodes, propellers, propeller shafts and struts.

#### Field Service Representative assistance and Engine Disassembly

Once the PRO and Station personnel agree that the engine repairs are beyond Unit capability or fall within the above repair program limitations, the PRO will authorize a Detroit Diesel Field Service Representative(FSR) to conduct troubleshooting and repairs. For payment under the above repair program, only the PRO may authorize work. Any costs associated with direction to the FSR without the PRO's knowledge will be the unit's responsibility. Overtime costs for FSRs will normally be charged to the unit.

Engines will be disassembled and inspected in accordance with DDC's published "Series 92 Service Manual" section 1. Reuse or replacement of all parts and hardware will be determined using DDC's published "Wear Guide Limits Manual". All inspection measurements will be logged with

a copy sent to the 47' MLB Project office. The PRO may request that visual documentation and/or further testing be provided for any failed items. All replaced parts will be maintained on site pending PRO's decision to discard, rebuild, or submit for failure analysis.

# Reduction Gear Warranty

The following list captures what is included in the 18 month reduction gear warranty:

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gear case
oil pump
clutch housing
clutch discs
gears
bearing
lube oil system including filter assembly (not filter element)
lube oil pressure switch
oil seals
control valve
heat exchanger
pressure build up valve
Shafts (input, intermediate, and output)
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